

Fig. 1

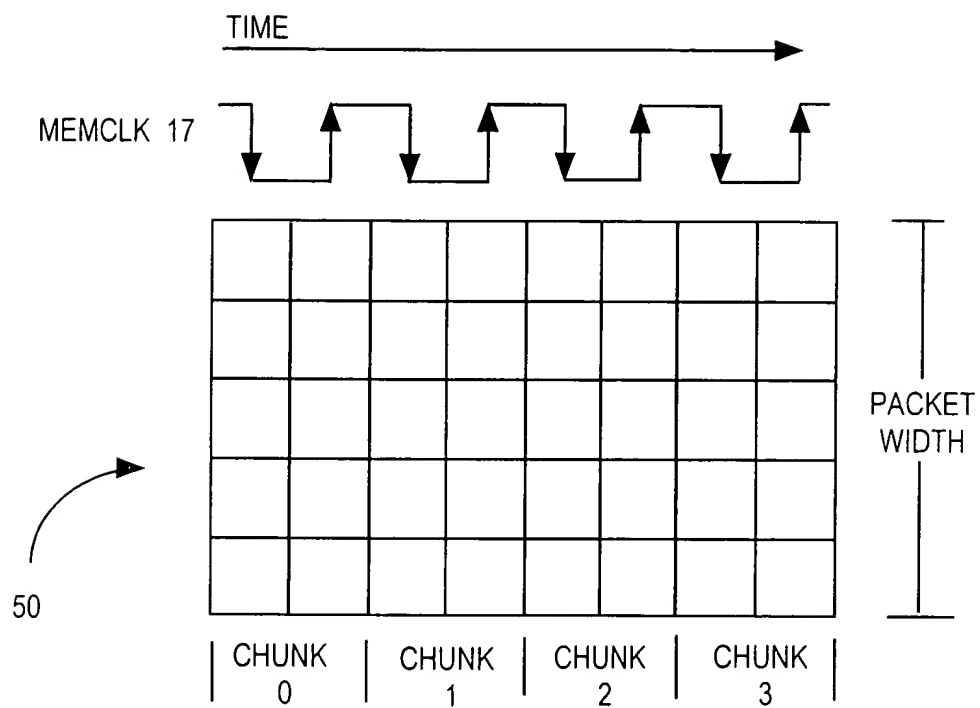
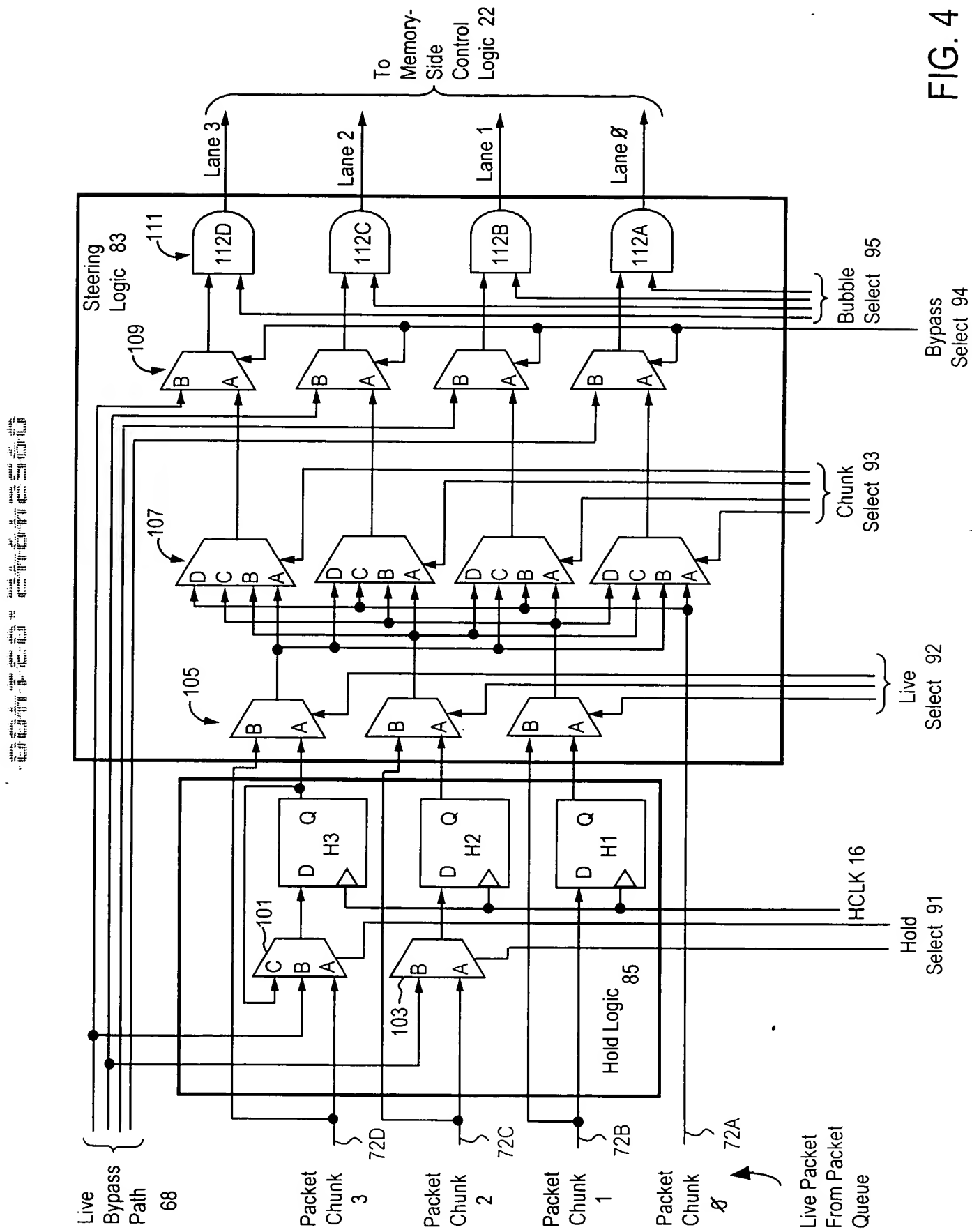
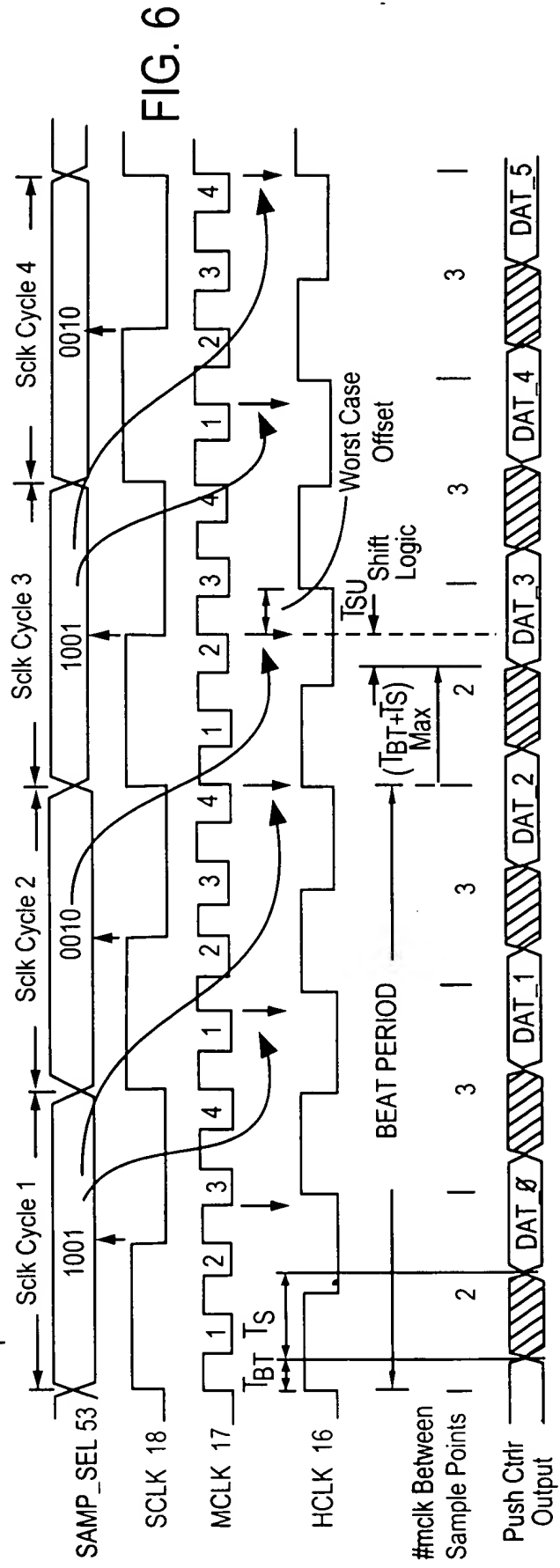
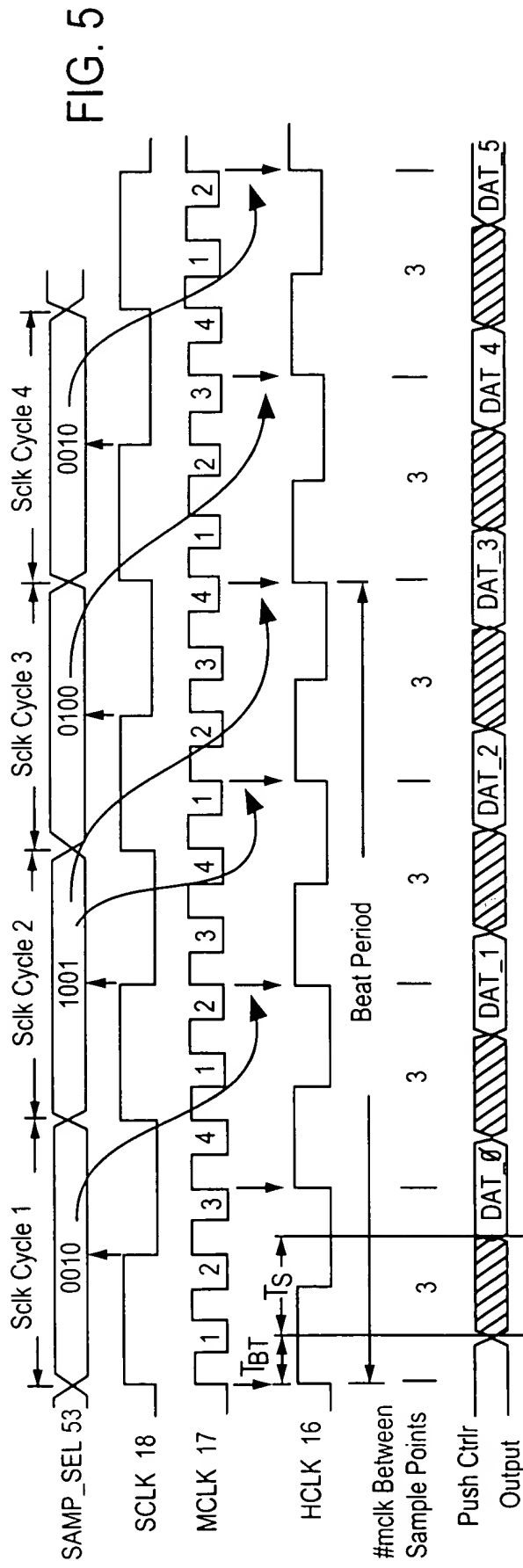


FIG. 2





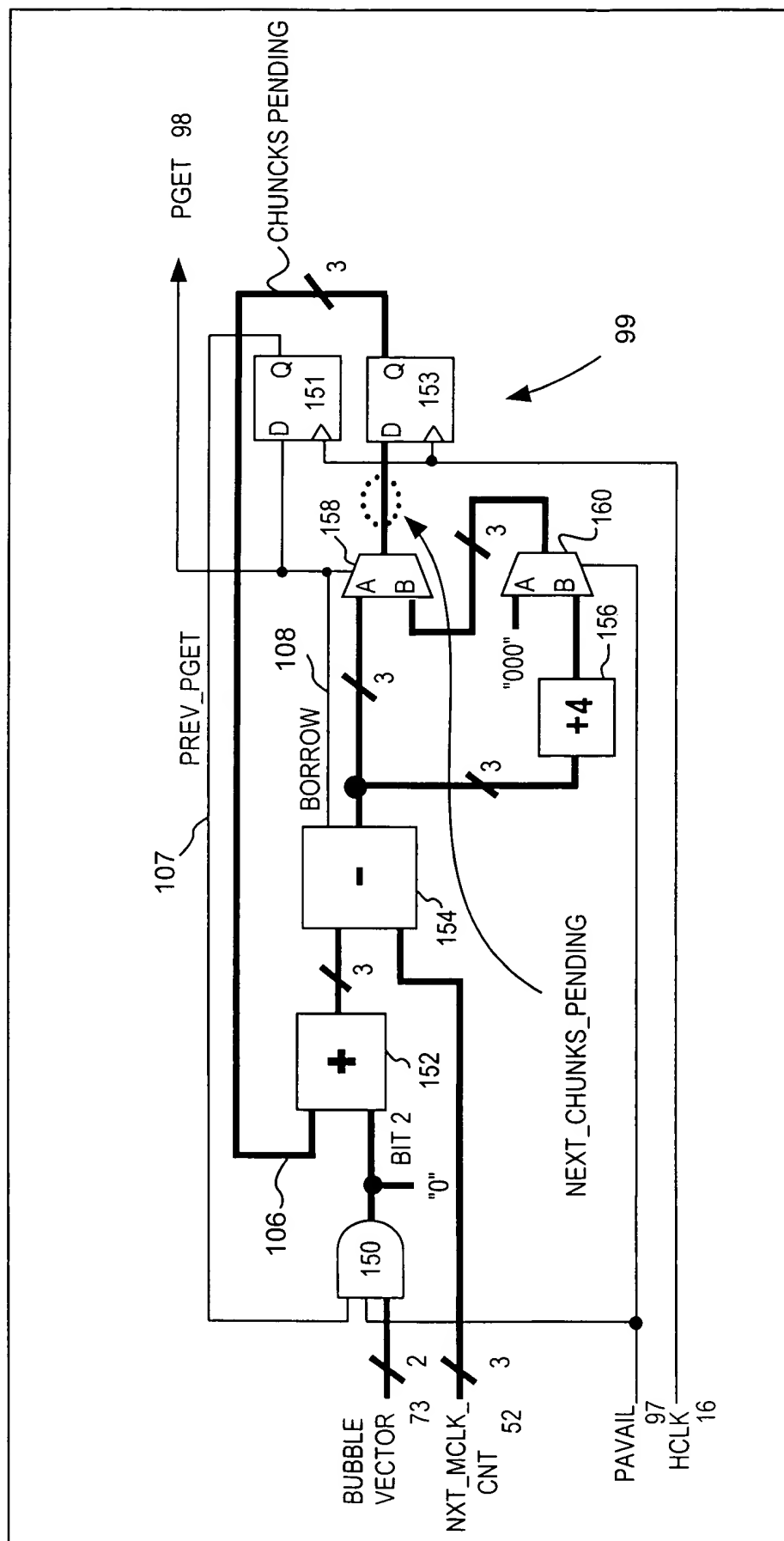


FIG. 7

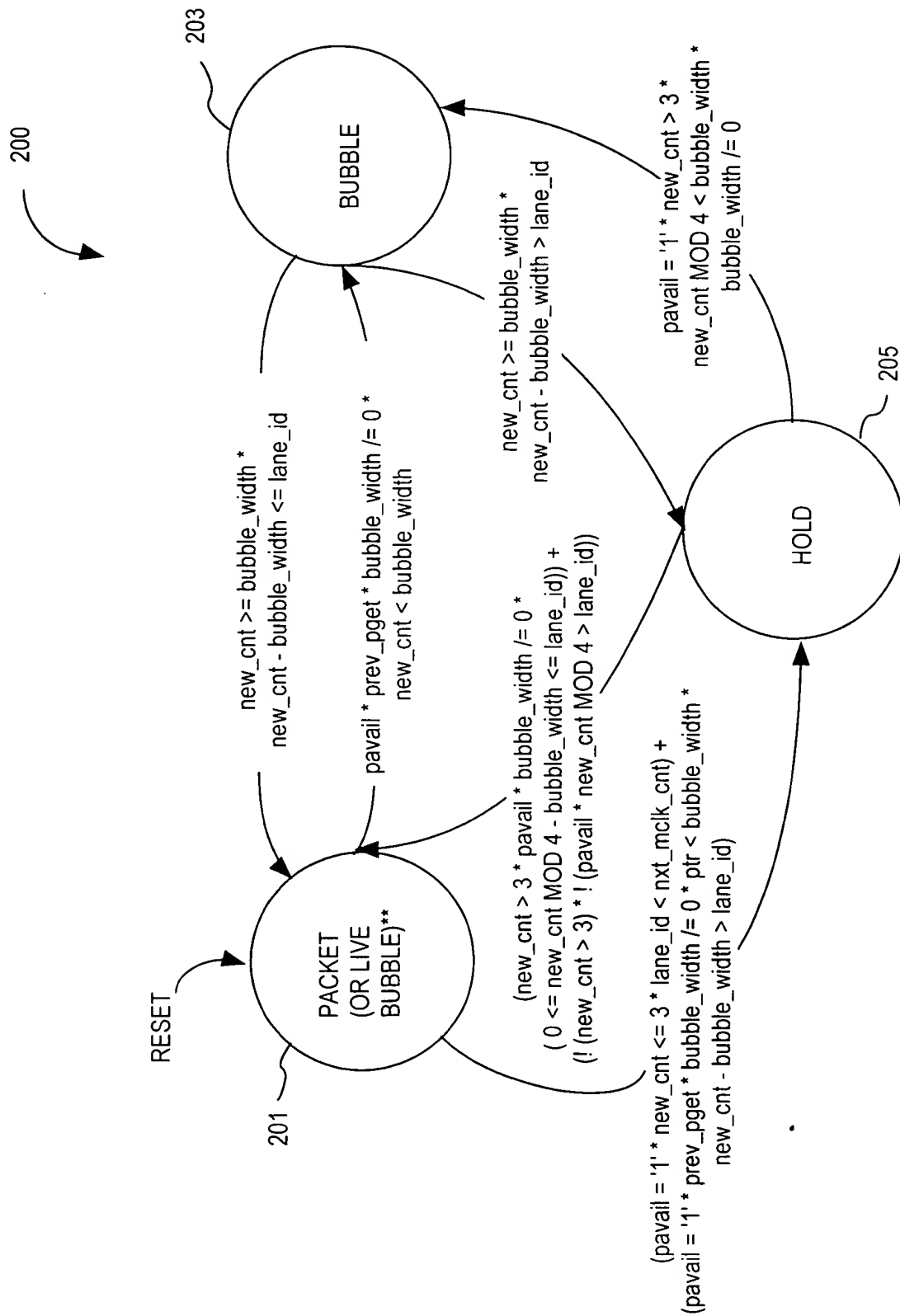


FIG. 8

nxt_ptr	Present lane_sel state	Condition
new_cnt MOD 4	HOLD	new_cnt > 3 * pavail == '1' * bubble_width /= 0 * new_cnt MOD 4 < bubble_width
new_cnt MOD 4	PACKET	new_cnt > 3 * pavail == '1'
new_cnt MOD 4 - bubble_width	HOLD	new_cnt > 3 * pavail == '1' bubble_width /= 0 * ! (new_cnt MOD 4 < bubble_width)
new_cnt - bubble_width	BUBBLE	new_cnt > bubble_width
new_cnt	HOLD	! (new_cnt > 3)
new_cnt	PACKET	! (new_cnt > 3) * pavai == '1'
new_cnt	BUBBLE	! (new_cnt > bubble_width)
lane_id	HOLD	new_cnt > 3 * pavail == '0'
lane_id	PACKET	pavail == '0' * (new_cnt > 3 + (! (new_cnt > 3) * new_cnt > lane_id)))

FIG. 9

HOLD SELECT LOGIC

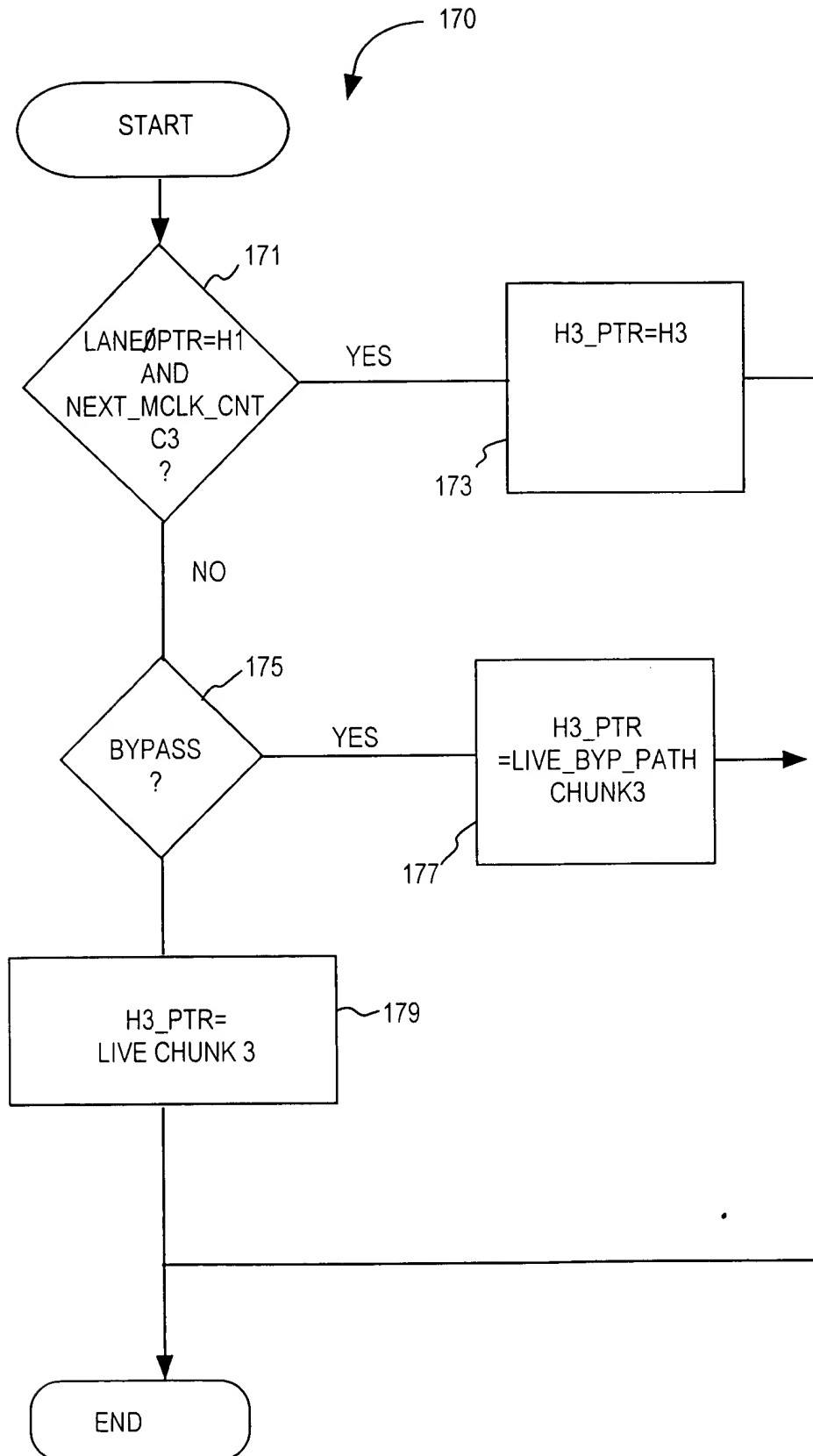


FIG. 10

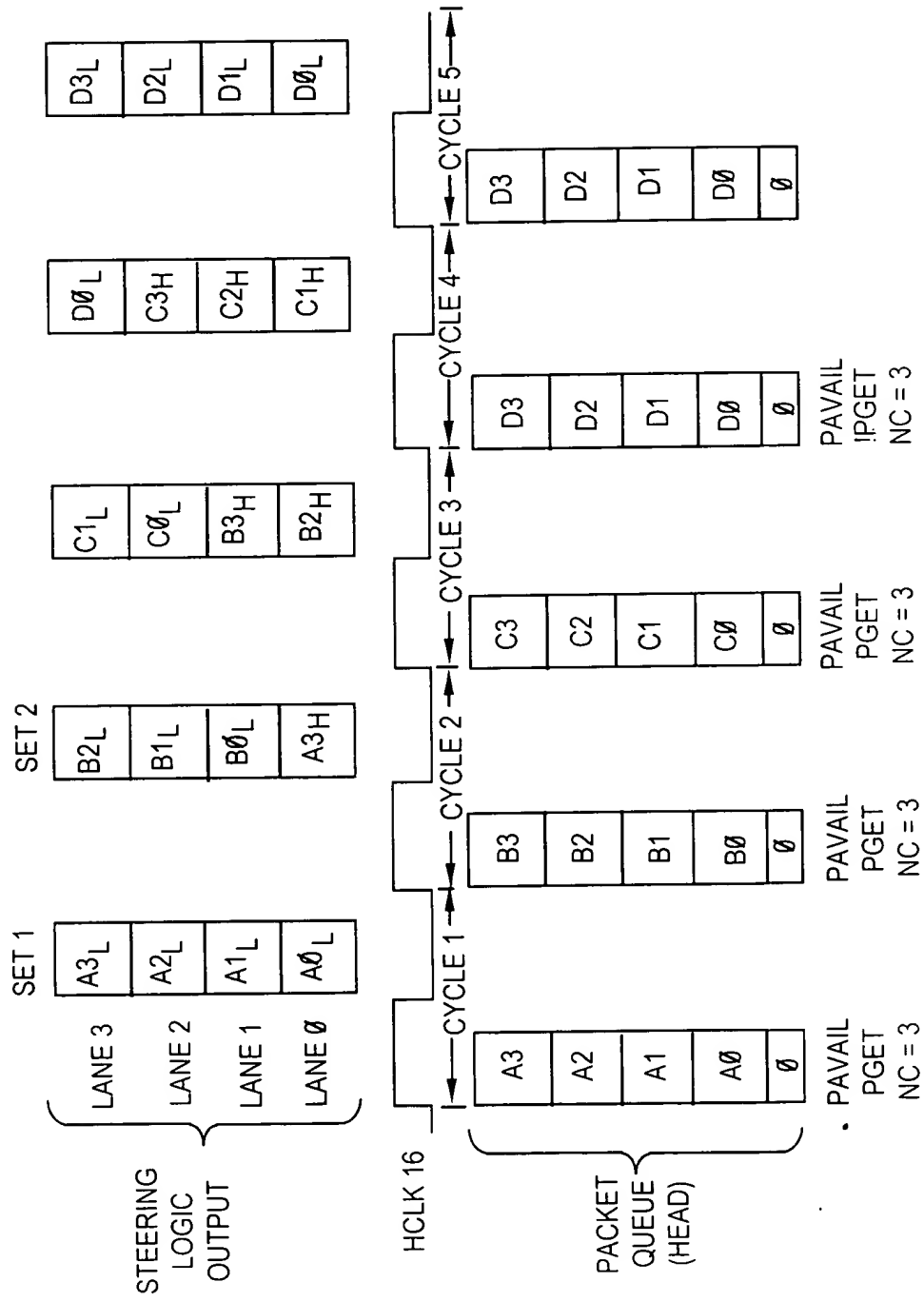


FIG. 11

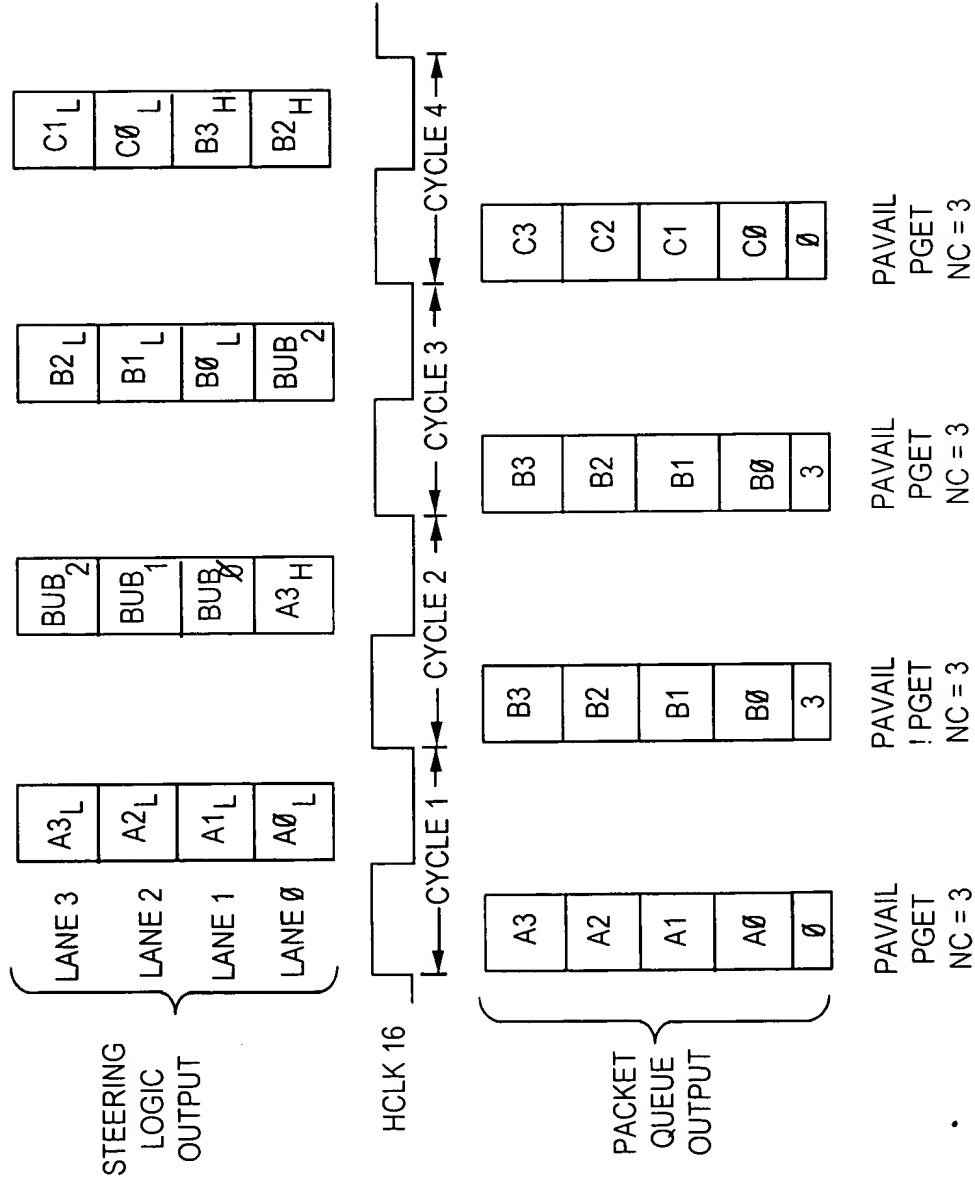


FIG.12

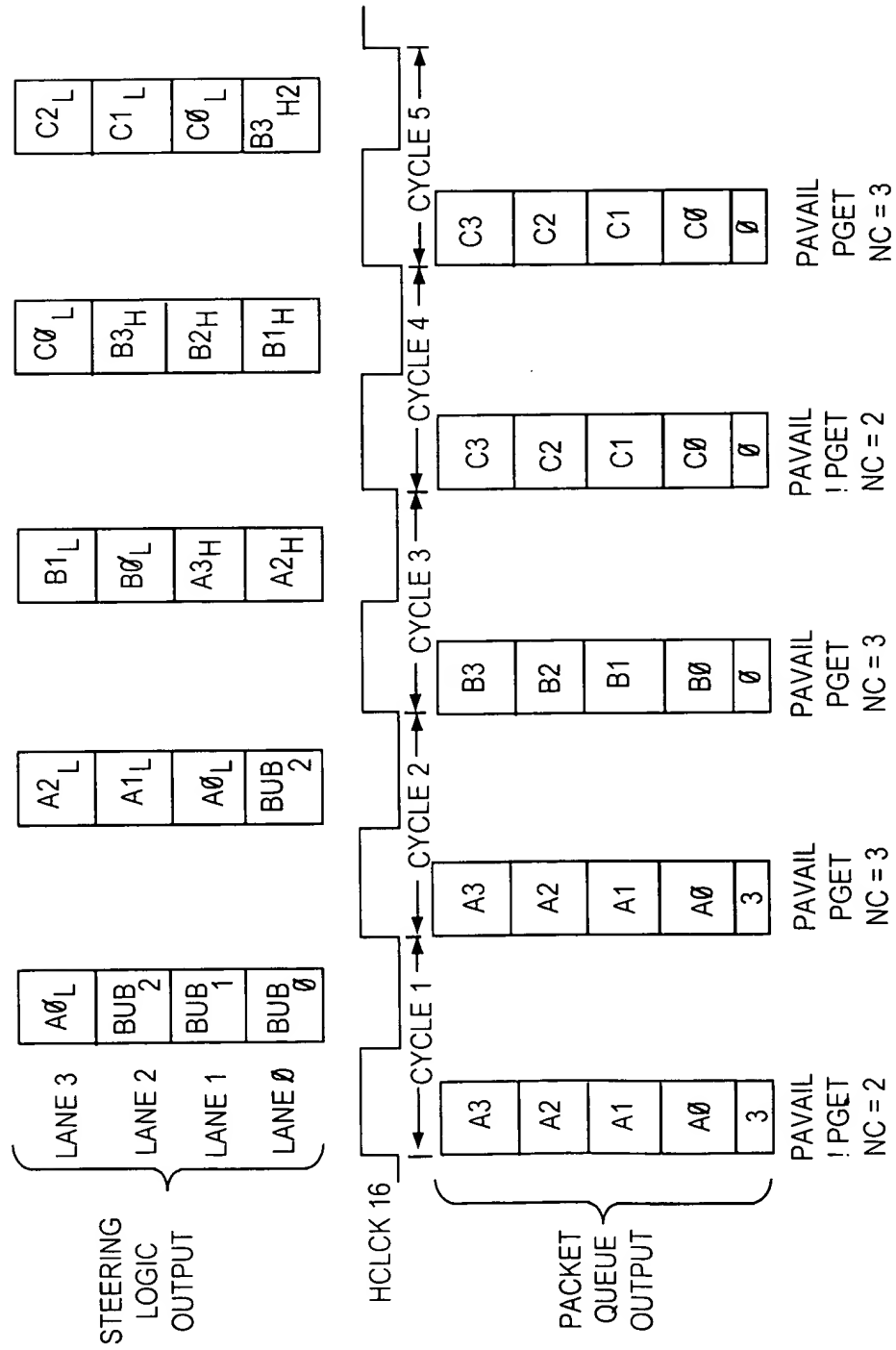


FIG. 13

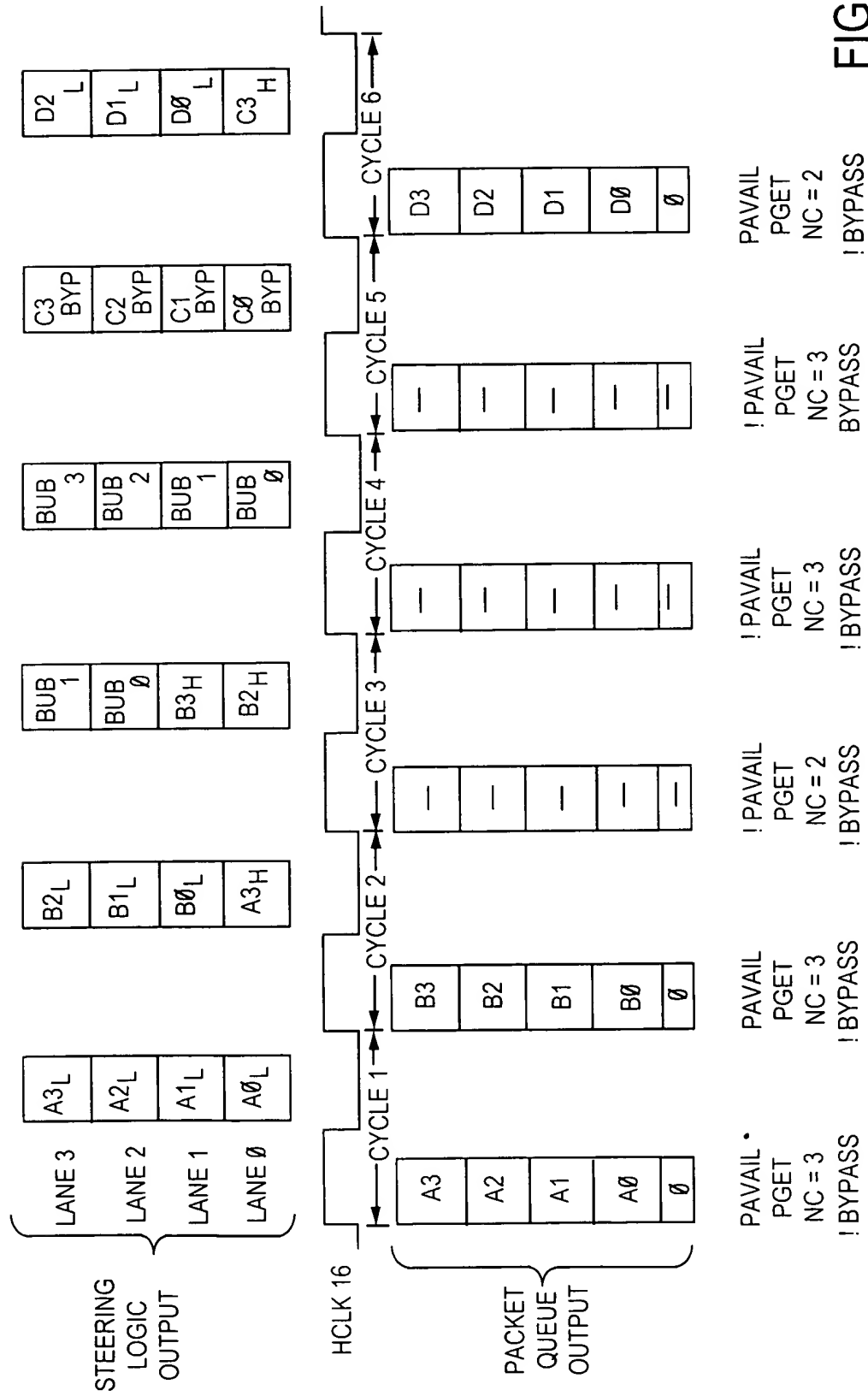


FIG. 14